

Following most recent scan, mean sac size increased by 13mm (–20 to +26) with 17% having a reduction in sac size ($n = 2$).

Conclusion: Our results show a low success rate which is in keeping with current data. Given the small patient numbers, larger study is required to confirm our preliminary findings. To this end we are planning to review all EVAR procedures, re-intervention rates and post-operative outcomes.

Endovascular Hybrid Repair for Aortic Arch aneurysm: Case Series and Review

D.W. Harkin, D. Dunlop

Department of Vascular and Endovascular Surgery, Royal Victoria Hospital, Belfast, Northern Ireland

The management of aortic arch aneurysm and dissection is challenging in often elderly patients with significant comorbid disease. Although conventional open surgery of aortic arch disease with total arch replacement still remains the gold standard, in the use of endovascular hybrid techniques have evolved and may reduce the risk of surgical morbidity and mortality in these high-risk patients. In selected patients the endovascular hybrid technique combines surgical bypass or debranching of the arch vessels to creating a secure proximal landing zone for concomitant or delayed endovascular stent grafting of the aortic arch and thoracic aorta to exclude aneurysm or dissected segment. The classification scheme for hybrid arch debranching procedures is based on the extent of proximal and distal landing zone reconstruction required, and thus the need and extent of cardiopulmonary bypass and circulatory arrest management strategies to be employed.

Methods, Results and Conclusions: We present a case series describing the 3 common variants of the endovascular hybrid repair for aortic arch aneurysm, namely: 1) left carotid-subclavian bypass; 2) carotid-carotid bypass; 3) debranching of the aortic arch. Furthermore, we critically review the literature and comment on current future concepts including branched endovascular techniques for aortic arch aneurysm.

Keywords: Hybrid arch repair; aortic aneurysm; thoracic aortic aneurysm; debranching procedure; thoracic aortic endovascular stent grafting; endovascular repair.

Emergency Transfer to Specialist Thoracic Endovascular Centre: A Safe and Feasible Option

Z. Ahmed, S.M. McHugh, A. Elmallah, N. Hamada, M.P. Colgan, A. O'Callaghan, S.M. O'Neill, P. Madhavan, Z. Martin

Department of Vascular Surgery, St. James's Hospital, Dublin 8, Ireland

Introduction: Endovascular repair has revolutionized the treatment of thoracic aortic disease. We report our 10 year experience using this treatment in emergency cases.

Methods: A prospectively held database (Vascubase) was analysed and all patients who underwent emergency thoracic stenting for acute aortic disease between 2005 and 2014 were identified.

Results: There were a total of 59 thoracic aorta stenting procedures. 33 patients (mean age = 58 years; 60% male) underwent emergency endovascular treatment for various thoracic pathologies: traumatic transection ($n = 10$), ruptured aneurysm ($n = 6$), non-traumatic dissection ($n = 8$) and penetrating aortic ulcer ($n = 9$).

All patients had self-expanding endografts implanted. 2 patients required debranching before the endovascular treatment. Thirty-day mortality was 15.1% (5/33). 70% of the patients received a single device. There were 7 procedure related complications out of which 6 required re-intervention: thoracotomy and drainage in 2 patients, proximal graft extension in 1, open drainage of groin haematoma in 1 and open repair of R CFA pseudoaneurysm in 1 patient.

In total 23 patients were transferred from 11 centres nationwide. There were no mortalities or other complications related to transfer of patient from peripheral centres.

Conclusion: Endovascular repair is a safe and effective treatment option which enables patients to be treated with lesser morbidity and mortality. Transfer of patients with acute pathology to a tertiary centre can safely be performed with good outcomes.

Comparative Results of Conventional and Eversion Carotid Endarterectomy

A. Nazar, F.M. Shaikh, J.F. Dowdall, M.C. Barry, S.J. Sheehan

Department of Vascular Surgery, St. Vincent's University Hospital, Elm Park, Dublin 4, Ireland

Introduction: Conventional carotid endarterectomy (cCEA), performed through a longitudinal arteriotomy is the most frequently described technique. Eversion carotid endarterectomy (eCEA), employing division at the origin of the internal carotid artery and reanastomosis, is reported to be associated with low perioperative stroke and restenosis rates. In our institution eCEA was introduced in January 2012. Our aim was to compare the outcome of eCEA to cCEA in our patients.

Variable	eCEA	cCEA	Total
Total procedures	63	114	177
Symptomatic	39	82	121
Asymptomatic	24	32	56
Operative time in min (Range)	55–100	110–150	55–150
Shunts	1	22	23
Perioperative Stroke	0	0	0
Follow up Duplex scans	44	88	132
30 Day Mortality	0	0	0
Re stenosis (range 20 to 70%).	1	4	5
Haematoma	5	2	7
Re exploration	4	2	6

Methods:

In this longitudinal, retrospective, comparative, cohort study, all patients undergoing carotid endarterectomy from July 2008 to July 2014 in St Vincent's University